

Title (en)  
IN-VITRO SENSOR USING A TETRAPOLAR IMPEDANCE MEASUREMENT

Title (de)  
IN-VITRO-SENSOR MIT TETRAPOLARER IMPEDANZMESSUNG

Title (fr)  
CAPTEUR IN VITRO UTILISANT UNE MESURE D'IMPÉDANCE TÉTRAPOLAIRE

Publication  
**EP 3391036 A4 20190731 (EN)**

Application  
**EP 16876721 A 20161215**

Priority  
• US 201562269277 P 20151218  
• US 2016067028 W 20161215

Abstract (en)  
[origin: WO2017106560A1] Systems, methods, and devices are provided for determining an impedance measurement of a sample of fluid on a test strip having a base layer, at least two drive electrodes disposed on the base layer and in electrical communication with a current-source (Iac) for flowing an AC current provided by the current-source (Iac) through a fluid sample between the at least two drive electrodes, and at least two sense electrodes disposed on the base layer and positioned between the at least two drive electrodes, each of the at least two sense electrodes configured for measuring a difference in an AC potential therebetween to determine an impedance measurement of the fluid sample between the at least two sense electrodes.

IPC 8 full level  
**G01N 27/30** (2006.01); **A61B 5/145** (2006.01); **C12Q 1/54** (2006.01); **G01N 27/00** (2006.01); **G01N 27/02** (2006.01); **G01N 27/04** (2006.01); **G01N 27/327** (2006.01); **G01N 33/49** (2006.01)

CPC (source: CN EP US)  
**A61B 5/14532** (2013.01 - EP US); **C12Q 1/54** (2013.01 - CN); **G01N 27/00** (2013.01 - CN); **G01N 27/02** (2013.01 - CN); **G01N 27/026** (2013.01 - US); **G01N 27/028** (2013.01 - US); **G01N 27/04** (2013.01 - CN); **G01N 27/30** (2013.01 - CN); **G01N 27/327** (2013.01 - CN); **G01N 27/3273** (2013.01 - US); **G01N 27/3274** (2013.01 - EP US); **G01N 33/49** (2013.01 - EP US); **A61B 5/14535** (2013.01 - EP US); **A61B 2562/0295** (2013.01 - EP US); **G01N 27/3272** (2013.01 - EP US)

Citation (search report)  
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• See references of WO 2017106560A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2017106560 A1 20170622**; AU 2016370920 A1 20180705; AU 2016370920 B2 20210114; CN 108496074 A 20180904; CN 113484382 A 20211008; EP 3391036 A1 20181024; EP 3391036 A4 20190731; JP 2019504310 A 20190214; MX 2018007386 A 20181109; TW 201732283 A 20170916; US 10718728 B2 20200721; US 2017176366 A1 20170622

DOCDB simple family (application)  
**US 2016067028 W 20161215**; AU 2016370920 A 20161215; CN 201680079819 A 20161215; CN 202110756298 A 20161215; EP 16876721 A 20161215; JP 2018531383 A 20161215; MX 2018007386 A 20161215; TW 105141863 A 20161216; US 201615381720 A 20161216